IN THE CLAIMS

1. (Original) Process for the preparation of 1-chloro-3,5-di-O-acyl-deoxy-L-ribofuranosidic derivatives of formula (I)

wherein R is an acyl group R'CO, in which R' is selected from the group consisting of alkyl groups C1-C6 and aryl groups C7-C13, possibly substituted with one or more substituents;

said process comprising the following steps:

i) reaction of 2-deoxy-D-galactose of formula (II) with methanol in the presence of an acid as catalyst to obtain the 1-O-methyl-2-deoxy-D-galactofuranoside of formula (III):

ii) oxidation of 1-O-methyl-2-deoxy-D-galactofuranoside of formula (III) coming from step i) with sodium meta periodate to obtain the corresponding aldehyde of formula (IV):

iii) reduction of the aldehyde of formula (IV) coming from step ii) with sodium borohydride to obtain the 1-O-methyl-2-deoxy-L-ribofuranoside of formula (V):

iv) acylation of O-methyl-2-deoxy-L-ribofuranose of formula (V) coming from step iii) with an acyl chloride of formula R'COCI, in presence of a tertiary amine base in an aprotic solvent to obtain the corresponding 1-O-methyl-3,5-di-O-acyl-2-deoxy-L-ribofuranoside having formula (VI):

$$CH_2OH$$
 (V)
 CH_2OR
 (VI)
 (VI)

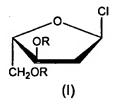
in which R' and R are defined as above;

v) chlorination of 1-O-methyl-3,5-di-O-acyl-2-deoxy-L-ribofuranoside of formula (VI) coming from step iv) with gaseous hydrochloric acid at a temperature lower than 20°C to obtain 1-chloro-3,5-di-O-acyl-2-deoxy-L-ribofuranoside of formula (I):

$$CH_2OR$$
 (VI)
 CH_2OR
 (I)

where R is defined as above.

2. (Original) Process for the preparation of 1-chloro-3,5-di-O-acyl-2-deoxy-L-ribofuranoside of formula (I)



wherein R is an acyl group R'CO, wherein R' is selected from the group consisting of alkyl groups C1-C6 and aryl groups C7-C13, possibly substituted with one or more substituents,

comprising the following steps:

iv') acylation of 1-O-methyl-2-deoxy-L-ribofuranoside of formula (V) with an acyl chloride of formula R'COCI, in presence of a tertiary amine base in an aprotic solvent, to obtain the corresponding 1-O-methyl-3,5-di-O-acyl-2-deoxy-L-ribofuranoside having formula (VI):

$$CH_2OH$$
 CH_2OR
 CH_2OR
 CH_2OR
 (VI)

wherein R' and R are defined as above;

v') chlorination of 1-O-methyl-3,5-di-O-acyl-2-deoxy-L-ribofuranoside of formula (VI) coming from step iv') with gaseous hydrochloric acid at a temperature below 20°C to obtain the 1-chloro-3,5-di-O-acyl-2-deoxy-L-ribofuranoside of formula (I):

wherein R is defined as above.

- 3. (Currently Amended) Process according to claim 1-2, wherein said substituents are selected from the group consisting of halogens, alkyl groups C1-C4, alkyloxy groups C1-C4 and nitro groups.
- 4. (Currently Amended) Process according to claim 1-er-2, wherein R' is benzoyl.
- 5. (Original) Process according to claim 4, wherein R' is selected from between p-toluoyl and p-chloro-benzoyl.
- 6. (Currently Amended) Process according to claim 1-or-2, wherein the amount of acyl chloride in step iv) or-iv')-ranges between 2 and 5 moles compared to the amount of 1-methyl-2-deoxy-L-ribofuranoside of formula (V).
- 7. (Currently Amended) Process according to claim 1-or-2, wherein said tertiary amine base in step iv) or iv') is triethylamine.

- 8. (Currently Amended) Process according to claim 1-or-2, wherein said aprotic solvent in step iv)-or-iv') is selected from the group consisting of acetone, acetonitrile, toluene, methylene chloride, tetrahydrofuran, and dimethylformamide.
- 9. (Original) Process according to claim 8, wherein said aprotic solvent is toluene.
- 10. (Currently Amended) Process according to claim 1-or-2, wherein said acylation reaction in step iv) or iv') is carried out at a temperature ranging between 0°C and the boiling point of the solvent used.
- 11. (Currently Amended) Process according to claim 10, wherein said acylation reaction in step iv) eriv') is carried out at a temperature of 60°C.
- 12. (Currently Amended) Process according to claim 1 er-2, wherein said chlorination reaction in step v) er-v') is carried out by insufflating gaseous hydrochloric acid in the reaction mixture in presence of acetyl chloride.
- 13. (Currently Amended) Process according to claim 1 er 2, wherein said chlorination reaction in step v) er v') is carried out at a temperature below 15°C.
- 14. (Currently Amended) Process according to claim 1 er-2, wherein said chlorination reaction in step v) er-v') is carried out in a solvent selected from the group consisting of toluene, xylene, isopropyl ether, ethyl ether, chloro-benzene and trichloroethane.
- 15. (Original) Process according to claim 14, wherein said solvent is toluene.
- 16. (Original) Process according to claim 1, wherein said reaction at step i) is carried out with anhydrous methanol in amount ranging between 2 and 20 litres per kilogram of 2-deoxy-galactose of formula (II).
- 17. (Original) Process according to claim 1, wherein in step i) said acid catalyst is obtained *in situ* by hydrolysis of the corresponding acyl chloride.
- 18. (Original) Process according to claim 17, wherein said acid catalyst is obtained *in situ* by hydrolysis of acetyl chloride.
- 19. (Original) Process according to claim 1, wherein said reaction in step i) is carried out maintaining the inner temperature of reaction below 3°C.

- 20. (Original) Process according to claim 1, wherein said reaction in step ii) is carried out using from 1 to 1,5 moles of sodium metaperiodate compared to the compound of formula (III).
- 21. (Original) Process according to claim 1, wherein said reaction in step ii) is carried out at a temperature below 10°C.
- 22. (Original) Process according to claim 1, wherein said reaction in step iii) is carried out in water using from 1/3 to 1 moles of sodium borohydride compared to the compound of formula (IV).
- 23. (Original) Process according to claim 1, wherein said reaction in step ii) is carried out at a temperature below 15°C.
- 24. (New) Process according to claim 2, wherein said substituents are selected from the group consisting of halogens, alkyl groups C1-C4, alkyloxy groups C1-C4 and nitro groups.
- 25. (New) Process according to claim 24, wherein R' is benzoyl.
- 26. (New) Process according to claim 25, wherein R' is selected from between p-toluoyl and p-chloro-benzoyl.
- 27. (New) Process according to claim 2, wherein the amount of acyl chloride in step iv') ranges between 2 and 5 moles compared to the amount of 1-methyl-2-deoxy-L-ribofuranoside of formula (V).
- 28. (New) Process according to claim 2, wherein said tertiary amine base in step iv') is triethylamine.
- 29. (New) Process according to claim 2, wherein said aprotic solvent in step iv') is selected from the group consisting of acetone, acetonitrile, toluene, methylene chloride, tetrahydrofuran, and dimethylformamide.
- 30. (New) Process according to claim 29, wherein said aprotic solvent is toluene.
- 31. (New) Process according to claim 2, wherein said acylation reaction in step iv') is carried out at a temperature ranging between 0°C and the boiling point of the solvent used.
- 32. (New) Process according to claim 31, wherein said acylation reaction in step iv') is carried out at a temperature of 60°C.

- 33. (New) Process according to claim 2, wherein said chlorination reaction in step v') is carried out by insufflating gaseous hydrochloric acid in the reaction mixture in presence of acetyl chloride.
- 34. (New) Process according to claim 2, wherein said chlorination reaction in step v') is carried out at a temperature below 15°C.
- 35. (New) Process according to claim 2, wherein said chlorination reaction in step v') is carried out in a solvent selected from the group consisting of toluene, xylene, isopropyl ether, ethyl ether, chloro-benzene and trichloroethane.
- 36. (New) Process according to claim 35, wherein said solvent is toluene.